

National Transportation Safety Board

Washington, D.C. 20594

Safety Recommendation

Date: January 3, 1997

In reply refer to: A-97-1

Honorable Linda Hall Daschle Acting Administrator Federal Aviation Administration Washington, D.C. 20591

On November 19, 1996, at 1703 central daylight time, a United Express Beechcraft 1900C (Beech 1900C), flight 5925, collided with a Beechcraft King Air A90, N1127D, at the Quincy Municipal Airport near Quincy, Illinois. Flight 5925 was completing its landing roll on runway 13, and the King Air was in its takeoff roll on runway 04 when the collision occurred. All 10 passengers and two crewmembers aboard flight 5925 and the two pilots of the King Air were killed. Flight 5925 was a scheduled passenger flight operating under the provisions of Title 14 Code of Federal Regulations (CFR) Part 135. The Beech 1900C was certificated under 14 CFR Part 23, Special Federal Aviation Regulation 41.

The evidence showed that at the intersection of the runways, the King Air collided with the right side of the Beech 1900C forward of its wing. Both airplanes were destroyed by the impact and ensuing fire. The evidence revealed that some occupants of the Beech 1900C survived the impact and moved to the forward air stair door.

A pilot employed by the airport's fixed-base operator (FBO) and two Beech 1900C-qualified United Express (UE) pilots were the first people to arrive at the accident site. When they arrived, the King Air and the right side of the Beech 1900C were fully engulfed in fire. The three pilots then ran to the forward left side of the fuselage of the Beech 1900C and saw the captain's head and arm protruding from her window; she asked them to "get the door open."

The FBO pilot stated that he attempted unsuccessfully to open the forward (main boarding) air stair door by turning the door's handle upward, and that he did not see any instructions for opening the door. Further, he said that he did not know that the proper procedure for opening the door involved depressing the button above the handle while simultaneously turning the handle. The UE pilot stated that he then interceded in the process of opening the door because he believed that the FBO pilot probably did not know how to do so. The UE pilot depressed the button while turning the handle but was also unable to open the door. The FBO pilot tried again to open the door but was unsuccessful.

Safety Board investigators examined another UE Beech 1900C to determine the proper way to open the air stair door. To unlock the door from the outside, a release button above the door handle must be depressed while the handle is simultaneously rotated downward. The following instructions for operating the air stair door were on a small placard, with black letters 2/10-inch high on a white background, that was located aft and slightly lower than the door handle: "PUSH BUTTON AND TURN HANDLE TO OPEN." The button above the handle was black, and it was located on a background color scheme of medium-hued blue. The button was neither outlined nor highly visible, and the instructions did not state that the button should be depressed while simultaneously rotating the handle nor did they indicate which direction to move the handle.

Clear, concise, and complete instructions for opening exits are critical for rescuers after accidents involving airplanes that have external handles within reach of people on the ground. Operators often use such airplanes at airports having no airport rescue and fire fighting services. Thus, persons untrained in airport crash and rescue or aircraft door operation might be required to respond and open the exits of these airplanes.

To date, the Safety Board's ongoing investigation has not yet determined why attempts to open the exit door were ineffective. Nonetheless, the Safety Board is able to conclude at this time that the externally mounted instructions for opening the exit door on the Beechcraft 1900 from the outside are not conspicuous, easily understood, or complete, and that this deficiency should be immediately addressed.

Accordingly, the Safety Board believes that the FAA should immediately issue a telegraphic AD directing all Beechcraft 1900 operators to (1) conspicuously identify the external air stair exit door button with highly visible markings, (2) indicate that the button must be depressed while the handle is rotated, and (3) include an arrow to show the direction that the handle must be moved to open the door.

Therefore, the National Transportation Safety Board recommends the following to the Federal Aviation Administration:

Immediately issue a telegraphic airworthiness directive directing all Beechcraft 1900 operators to (1) conspicuously identify the external air stair exit door button with highly visible markings, (2) indicate that the button must be depressed while the handle is rotated, and (3) include an arrow to show the direction that the handle must be moved to open the door. (Urgent Action) (A-97-1)

Chairman HALL, Vice Chairman FRANCIS, and Members HAMMERSCHMIDT, GOGLIA, and BLACK concurred in this recommendation.

Jim Hall Ghairman